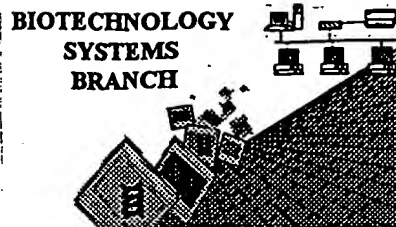


*SP-101 B* *Burner*

## RAW SEQUENCE LISTING ERROR REPORT



10D12

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/623,304  
Source: 1647  
Date Processed by STIC: 3/7/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER  
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND  
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



1647

**Does Not Comply  
Corrected Diskette Needed**

## RAW SEQUENCE LISTING

DATE: 03/07/2002

PATENT APPLICATION: US/09/623,304

TIME: 10:29:16

Input Set : A:\-4-1.app

Output Set: N:\CRF3\03072002\I623304.raw

3 <110> APPLICANT: Silvia, Christopher  
 4 Yu, Weifeng  
 5 ICAGEN, Inc.  
 7 <120> TITLE OF INVENTION: Identification and Expression of Human Kir5.1  
 9 <130> FILE REFERENCE: 018512-000410US  
 11 <140> CURRENT APPLICATION NUMBER: US 09/623,304  
 12 <141> CURRENT FILING DATE: 2001-02-21  
 14 <150> PRIOR APPLICATION NUMBER: US 60/076,612  
 15 <151> PRIOR FILING DATE: 1998-03-03  
 17 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/04549  
 18 <151> PRIOR FILING DATE: 1999-03-02  
 20 <160> NUMBER OF SEQ ID NOS: 4  
 22 <170> SOFTWARE: PatentIn Ver. 2.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 383  
 26 <212> TYPE: PRT  
 27 <213> ORGANISM: Homo sapiens  
 29 <220> FEATURE:  
 30 <223> OTHER INFORMATION: human Kir5.1 alpha subunit monomer of inward  
 31 rectifier potassium channel  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: PEPTIDE  
 35 <222> LOCATION: (351)..(383)  
 36 <223> OTHER INFORMATION: tail region  
 38 <400> SEQUENCE: 1  
 39 Met Ser Tyr Tyr Gly Ser Ser Tyr His Ile Ile Asn Ala Asp Ala Lys  
 40 1 5 10 15  
 41 Tyr Pro Gly Tyr Pro Pro Glu His Ile Ile Ala Glu Lys Arg Arg Ala  
 42 20 25 30  
 43 Arg Arg Arg Leu Leu His Lys Asp Gly Ser Cys Asn Val Tyr Phe Lys  
 44 35 40 45  
 45 His Ile Phe Gly Glu Trp Gly Ser Tyr Val Val Asp Ile Phe Thr Thr  
 46 50 55 60  
 47 Leu Val Asp Thr Lys Trp Arg His Met Phe Val Ile Phe Ser Leu Ser  
 48 65 70 75 80  
 49 Tyr Ile Leu Ser Trp Leu Ile Phe Gly Ser Val Phe Trp Leu Ile Ala  
 50 85 90 95  
 51 Phe His His Gly Asp Leu Leu Asn Asp Pro Asp Ile Thr Pro Cys Val  
 52 100 105 110  
 53 Asp Asn Val His Ser Phe Thr Gly Ala Phe Leu Phe Ser Leu Glu Thr  
 54 115 120 125  
 55 Gln Thr Thr Ile Gly Tyr Gly Tyr Arg Cys Val Thr Glu Glu Cys Ser  
 56 130 135 140

→ must give location and explain what residue Xaa represents - see p. 4

## RAW SEQUENCE LISTING

DATE: 03/07/2002

PATENT APPLICATION: US/09/623,304

TIME: 10:29:16

Input Set : A:\-4-1.app

Output Set: N:\CRF3\03072002\I623304.raw

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57 Val Ala Val Leu Met Val Ile Leu Gln Ser Ile Leu Ser Cys Ile Ile
58 145 150 155 160
59 Asn Thr Phe Ile Ile Gly Ala Ala Leu Ala Lys Met Ala Thr Ala Arg
60 165 170 175
61 Lys Arg Ala Gln Thr Ile Arg Phe Ser Tyr Phe Ala Leu Ile Gly Met
62 180 185 190
63 Arg Asp Gly Lys Leu Cys Leu Met Trp Arg Ile Gly Asp Phe Arg Pro
64 195 200 205
65 Asn His Val Val Glu Gly Thr Val Arg Ala Gln Leu Leu Arg Tyr Thr
66 210 215 220
67 Glu Asp Ser Glu Gly Arg Met Thr Met Ala Phe Lys Asp Leu Lys Leu
68 225 230 235 240
69 Val Asn Asp Gln Ile Ile Leu Val Thr Pro Val Thr Ile Val His Glu
70 245 250 255
71 Ile Asp His Glu Ser Pro Leu Tyr Ala Leu Asp Arg Lys Ala Val Ala
72 260 265 270
73 Lys Asp Asn Phe Glu Ile Leu Val Thr Phe Ile Tyr Thr Gly Asp Ser
74 275 280 285
W--> 75 Thr Gly Thr Ser His Gln Ser Arg Ser Ser Tyr Val Pro Arg Xaa Ile
76 290 295 300
77 Leu Trp Gly His Arg Phe Asn Asp Val Leu Glu Val Lys Arg Lys Tyr
78 305 310 315 320
79 Tyr Lys Val Asn Cys Leu Gln Phe Glu Gly Ser Val Glu Val Tyr Ala
80 325 330 335
81 Pro Phe Cys Ser Ala Lys Gln Leu Asp Trp Lys Asp Gln Gln Leu His
82 340 345 350
83 Ile Glu Lys Ala Pro Pro Val Arg Glu Ser Cys Thr Ser Asp Thr Lys
84 355 360 365
85 Ala Arg Arg Arg Ser Phe Ser Ala Val Ala Ile Val Ser Ser Trp
86 370 375 380
89 <210> SEQ ID NO: 2
90 <211> LENGTH: 1509
91 <212> TYPE: DNA
92 <213> ORGANISM: Homo sapiens
94 <220> FEATURE:
95 <223> OTHER INFORMATION: human Kir5.1 alpha subunit monomer of inward
96 rectifier potassium channel
98 <220> FEATURE:
99 <221> NAME/KEY: unsure
100 <222> LOCATION: (1279)
101 <223> OTHER INFORMATION: n = a, g, c or t
103 <400> SEQUENCE: 2
104 ttactactac aaaactcacc tggatcccta agggcacagc aaagaatgag ctattacggc 60
105 agcagctatc atattatcaa tgcggacgca aaatacccag gctaccgcgc agagcacatt 120
106 atagctgaga agagaagagc aagaagacga ttacttcaca aagatggcag ctgtaatgtc 180
107 tactttcaagc acatttttgg agaattggga agctatgtgg ttgacatctt caccactctt 240
108 gtggacacca agtggcgcca tatgtttgtg atattttctt tatottatat tctctcgtgg 300
109 ttgatatttg gctctgtctt ttggctcata gcctttcatt atggcgatct attaaatgat 360
110 ccagacatca caccttgtgt tgacaacgtc cattotttca caggggcctt tttgttctcc 420

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/623,304

DATE: 03/07/2002

TIME: 10:29:16

Input Set : A:\-4-1.app

Output Set: N:\CRF3\03072002\I623304.raw

```

111 ctagagaccc aaaccacccat aggatatggt tatcgctgtg ttactgaaga atgttctgtg 480
112 gccgtgctca tggatgaccc ccagtcacac ttaagttgca tcataaatac ctttatcatt 540
113 ggagctgcct tggccaaaat ggcaactgct cgaaagagag cccaaacccat tcgtttcagc 600
114 tactttgcac ttataggtat gagagatggg aagctttgcc tcatgtggcg cattggtgat 660
115 ttctggccaa accacgtggt agaagggaaca gttagagccc aacttctccg ctatacagaa 720
116 gacagtgaag ggaggatgac gatggcattt aaagacctca aattagtcaa cgaccaaacc 780
117 atcctgggta ccccggtaac tattgtccat gaaattgacc atgagagccc tctgtatgcc 840
118 cttgaccgca aagcagtagc caaagataac tttgagattt tggtgacatt tatctatact 900
119 ggtgattcca ctggaacatc tcaccaatct agaagctcct atgttccccg araaattctc 960
120 tggggccata ggtttaatga tgtcttgga gtttaagagga agtattacaa agtgaactgc 1020
121 ttacagtttg aaggaagtgt ggaagtatat gccccctttt gcagtgccaa gcaattggac 1080
122 tggaaagacc agcagctcca catagaaaaa gcaccaccag ttcgagaatc ctgcacgtcg 1140
123 gacaccaagg cgagacgaag gtcatttagt gcagttgcca ttgtcagcag ctggtgaaaa 1200
124 ccctgaggag accaccactt tcgccacaca tgaatatagg gaaacacctt atcagaaagc 1260
W--> 125 tctccctgac tttaaacang aatcctctgt wgaatcccaa atgttagtcc taaaattgca 1320
126 attatgaggg ctaccactga atcattttat ctttcagcca atcaagtcgt tgtaaacgtg 1380
127 gcttttttga aagtgttatg gctatgtttt atgatgatgc tgggtaagta gagtaagtta 1440
128 aacttggtaa aagataatct aaaaattcca tagttctcag ttattaaaaa ttttcttgtt 1500
129 ccggaattc 1509
131 <210> SEQ ID NO: 3
132 <211> LENGTH: 24
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
139 <400> SEQUENCE: 3
140 cctaagggca cagcaaagaa tgag 24
142 <210> SEQ ID NO: 4
143 <211> LENGTH: 20
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Description of Artificial Sequence:primer
150 <400> SEQUENCE: 4
151 gtgtggcgaa agtgggtggc 20

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/623,304

DATE: 03/07/2002  
TIME: 10:29:18

Input Set : A:\-4-1.app  
Output Set: N:\CRF3\03072002\I623304.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 303

Seq#:2; N Pos. 1279

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/623,304

DATE: 03/07/2002

TIME: 10:29:18

Input Set : A:\-4-1.app

Output Set: N:\CRF3\03072002\I623304.raw

L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:288

L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:1260